IN THE CLAIMS:

ť

Claims 1 - 15 (cancelled)

16. (New) A method for making a variable stiffness occlusive coil for use in interventional therapy and vascular surgery adapted to be inserted into a portion of a vasculature for occluding the portion of the vasculature of a patient, comprising the steps of:

providing a coil formed from at least one flexible strand of a flexible shape memory metal having an Austenite phase finish temperature, said coil having a primary coil configuration; and

artificially aging a plurality of segments of said coil to cause said plurality of segments to have an Austenite phase finish temperature that is greater than the Austenite phase finish temperature of the remainder of the variable stiffness coil.

- 17. (New) The method of Claim 16, wherein said step of providing a coil comprises heating said coil in a desired three dimensional configuration to set said three dimensional configuration.
- 18. (New) The method of Claim 16, wherein said step of artificially aging said plurality of segments of said coil raises the Austenite phase finish temperature of said plurality of segments of said coil to about 35° C to 50° C.